Identification of Coniella musaiaensis as pathogen causing stem rot disease of Hibiscus cannabinus L. in Terengganu, Malaysia

ABSTRACT

Hibiscus cannabinus (kenaf) plant is claimed as one of the fast-growing herbaceous plants with the high potential as a fiber or lignocelluloses material which is widely planted in Setiu, Terengganu, Malaysia. However, the stem rot disease was observed to be the most problematic in getting the good yields. Microbes associated with H. cannabinus that showing typical symptoms of rot-like disease were isolated using direct plating techniques. Koch's postulates proved that Coniella musaiaensis was fungus that caused stem rot disease to kenaf out of four isolated fungi. Plant-pathogen interaction revealed the mechanism of infection by direct penetration of fungus through the outer surface of stems, since present of appressorium on the surface of host (H. cannabinus).

Keyword: Hibiscus cannabinus; Stem rot disease; Coniella musaiaensis; Koch postulatess; Fungi; Plant-pathogen interaction